

DERWENT-ACC-NO: 2006-486232

DERWENT-WEEK: 200650

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TITLE: Method for forming thermal spray coating using copper or copper alloy as thermal spray material by gas flame spraying, arc spraying or plasma spraying

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PRIORITY-DATA: 2003KR-0097078 (December 26, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 2005065911 A	June 30, 2005	N/A	000	C23C 004/06

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
KR2005065911A	N/A	2003KR-0097078	December 26, 2003

INT-CL (IPC): C23C004/06

ABSTRACTED-PUB-NO: KR2005065911A

BASIC-ABSTRACT:

NOVELTY - To provide a thermal spray coating method that is capable of easily removing a deposition film, preventing corrosion of a base metal and reducing cleaning time in a deposition process of thin films for fabricating semiconductors and liquid crystal displays.

DETAILED DESCRIPTION - A thermal spray coating method is characterized in that a thermal spray coating is formed on the surface of a base metal by a thermal spray method using copper or copper alloy as a thermal spray material, where the copper alloy is an alloy of 50 wt.% or more of copper (Cu), and 1 to 50 wt.% of aluminum (Al), 1 to 50 wt.% of iron (Fe), 1 to 60 wt.% of zinc (Zn), 0 to 10 wt.% of tin (Sn), 0 to 10 wt.% of manganese (Mn), 0 to 10 wt.% of silicon (Si), 0 to 20 wt.% of nickel (Ni) or a combination thereof, where the thermal spray method is flame spraying, plasma spraying or arc spraying, where the thermal spray material is a wire having diameter of 2 to 5 mm in case that the thermal spray coating is formed by the flame spraying, where the thermal spray material is a wire having diameter of 1 to 4 mm in case that the thermal spray coating is formed by the arc spraying, and where the thermal spray material is

powder having particle diameter of 80 μ m or less in case that the thermal spray coating is formed by the plasma spraying.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: METHOD FORMING THERMAL SPRAY COATING COPPER COPPER
ALLOY THERMAL
SPRAY MATERIAL GAS FLAME SPRAY ARC SPRAY PLASMA SPRAY

DERWENT-CLASS: L03 M13 M26 M27 U11 U14 V05

CPI-CODES: L04-C10D; M13-C01; M26-B03; M26-B03A; M26-B03J; M26-B03Z; M26-B07;
M26-B07A; M26-B07J; M26-B07Z; M27-A; M27-A00A; M27-A00C; M27-A00Z;

EPI-CODES: U11-C05C2; U11-C09A; U14-K01A1K; V05-F05C; V05-F05E5;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2006-153189

용사 재료	비율(%)
Cu	50 - 100
Al	1 - 50
Fe	1 - 50
Zn	1 - 60
Sn	0 - 10
Mn	0 - 10
Si	0 - 10
Ni	0 - 20